

METHOD OF MAKING A SEMICONDUCTOR DEVICE, AND SEMICONDUCTOR
DEVICE MADE THEREBY

ABSTRACT OF THE DISCLOSURE

5 A method of making a semiconductor device includes the steps of: providing a
semiconductor substrate (110, 510, 1010, 1610) having a patterned interconnect layer (120, 520,
1020, 1620) formed thereon; depositing a first dielectric material (130, 530, 1030, 1630) over the
interconnect layer; depositing a first electrode material (140, 540, 1040, 1640) over the first
dielectric material; depositing a second dielectric material (150, 550, 1050, 1650) over the first
10 electrode material; depositing a second electrode material (160, 560, 1060, 1660) over the second
dielectric material; patterning the second electrode material to form a top electrode (211, 611,
1111, 1611) of a first capacitor (210, 710, 1310, 1615); and patterning the first electrode material
to form a top electrode (221, 721, 1221, 1621) of a second capacitor (220, 720, 1320, 1625), to
form an electrode (212, 712, 1212, 1612) of the first capacitor, and to define a resistor (230, 730,
15 1330).